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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,384	11/26/2003	Hien Boon Tan	Q73159	6008
23373	7590	04/22/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			WILLIAMS, ALEXANDER O	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/721,384

Applicant(s)

TAN ET AL.

Examiner

Alexander O. Williams

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 2-5, 8-12 and 14-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/25/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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Serial Number: 10/721384    Attorney's Docket #: Q73159  
Filing Date: 11/26/2003;

Applicant: Tan et al.

Examiner: Alexander Williams

Applicant's Amendment/Election with traverse of Species I of figure 2 (device claims 1, 6, 7, and 13) filed 1/28/05 is acknowledged.

Applicant's arguments have been considered. Applicant's election of Species 1 (figures 2 and 8, claims 1, 6, 7 and 13) will be examined.

This application contains claims 2-5, 8-12 and 14-25 drawn to an invention non-elected with traverse. A complete response to the final rejection must include cancellation of non-elected claims or other appropriate action (see 37 CFR § 1.144 & MPEP § 821.01).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:  
A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 6, 7 and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Huang et al. (U.S. Patent # 6,414,385 B1).

1. Huang et al. (figures 1 to 8) specifically figure 5 show an integrated circuit package **220** comprising: a) a plurality of leads **202** each having a first face and a second face opposite to said first face; b) a die pad **200** having a first face and a second face opposite to said first face, wherein said second face of said die pad is orthogonally offset from said second face of said leads, such that said second face of said die pad and said second face of said leads are not coplanar; c) an integrated circuit chip **208** substantially laterally disposed between said plurality of leads and having a first face and a second face opposite to said first face, whereby said first face of said integrated circuit chip is proximate to said second face of said die pad and is coupled to said second face of said die pad; and d) a plurality of wires **216** linking said plurality of leads to said integrated circuit chip, each of said plurality of wires comprising: a first end electrically conductively joined to said first face of said IC chip, wherein said first end is

disposed between a plane defined by said second face of said die pad and a plane defined by said first face of said integrated circuit chip, and a second end electrically conductively joined to said first face of one of said plurality of leads, wherein said second end is disposed between a plane defined by said first face of said die pad and a plane defined by said first face of one of said plurality of leads.

6. The integrated circuit package according to claim 1, Huang et al. show wherein said plurality of leads and said die pad are composed of a common copper alloy.

7. The integrated circuit package according to claim 1, Huang et al. show wherein said plurality of wires are composed of one of a group comprising: gold, gold with some level of impurities, aluminum, and copper.

13. The integrated circuit package according to claim 1, Huang et al. show wherein: said plurality of leads and said die pad are formed from a leadframe, said leadframe comprising: an outer frame supporting said plurality of leads extending substantially inward from said outer frame, and a plurality of tie bars securing said outer frame to said die pad, substantially centrally disposed within said outer frame; and wherein each of said plurality of tie bars includes a mechanical depression, such that an offset is created between said die pad and said plurality of leads.

The listed references are cited as of interest to this application, but not applied at this time.

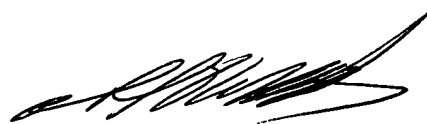
Field of Search	Date
U.S. Class and subclass: 257/684,796,712,713,717,720,690,777,782,783,784,786,788,676,675,666,696,698	4/17/05
Other Documentation: foreign patents and literature in 257/684,796,712,713,717,720,690,777,782,783,784,786,788,676,675,666,696,698	4/17/05
Electronic data base(s): U.S. Patents EAST	4/17/05

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander O. Williams whose telephone number is (571) 272 1924. The examiner can normally be reached on M-F 6:30-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272 1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alexander O Williams  
Primary Examiner  
Art Unit 2826

AOW  
4/18/05